Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Withdrawn) A device for iontophoretic delivery of a drug to or into a tissue, comprising an arrangement that prevents operation of the device at a current density that is higher than a predetermined value, said arrangement including first means responsive to a first data item, indicative of the surface area through which the current is to pass, as to set the maximal current allowed at the surface area indicated by said data item.

2. (Withdrawn) A device according to claim 1, further comprising second means, being responsive to a second data item, indicative of the tissue to be treated, said first and second means being responsive to said first and second data items as to set the maximal current allowed at the surface area indicated by said first data item for treating the tissue indicated by said second data item.

3. (Withdrawn) A device according to claim 1, further comprising an arrangement that prevents the continuous operation of the device for a time duration longer than a predetermined time value, said arrangement including means responsive to said first and/or second data item as to set the maximal duration of continuous operation in accordance with the surface area indicated by said first data item and optionally also in accordance with the tissue indicated by said second data item.

4. (Withdrawn) A device according to claim 1, including input means for manually inputting data that is indicative to the surface area.

5. (Withdrawn) A device according to claim 1 comprising:

(a) a contacting member capable of contacting with the tissue a drug-containing sponge, said contacting member being capable of transmitting a signal indicative of the surface area of said sponge; and

(b) a receiving element, capable of receiving said signal and being in communication with said first means.

6. (Withdrawn) A device according to claim 5, wherein said contacting member including a transducer and said receiving element is a microprocessor in communication with said transducer.

7. (Withdrawn) A device according to claim 1, including a microprocessor programmed with a table including predetermined values of maximal current as function of the surface area or as function of the data indicative thereof.

8. (Withdrawn) A device according to claim 7, wherein said microprocessor is also programmed with a table including predetermined values of maximal current as function of the surface area and the tissue, or as function of the data indicative thereof.

9. (Withdrawn) A device according to claim 7, wherein said microprocessor is also programmed with a table including predetermined values of maximal operation durations as function of operation current and the tissue, or as function of data indicative thereof.

10. (Withdrawn) A device according to claim 1, designed specifically for iontophoretic administration of charged drugs to eye tissue, mucosal tissue, or internal tissue.

11. (Withdrawn) A device according to claim 10 comprising:

- an applicator formed with a receiving portion adapted for holding a replaceable sponge loaded with said charged drug and allowing contact of at least a portion of the sponge with a surface of the tissue;
- a first data input element, allowing to input thereby data indicative of the area of said portion;
- an electric current generating element, for generating currents not higher than a predetermined value, being electrically coupled to said receiving portion such that the current once generated passes through the sponge in a direction essentially normal to said surface;
- a processor capable of determining said predetermined value in accordance with the data inputted by said first data input element.

12. (Withdrawn) A device according to claim 11, further comprising a second data input element allowing to input thereby the specific tissue to be treated and said processor is being capable of determining said predetermined value in accordance with this data and in accordance with the data indicative of the sponge's area.

13. (Withdrawn) A device according to claim 1, wherein said first means includes a processor.

14. (Withdrawn) A method for iontophoretically administering drug to or into a tissue, comprising determination of a maximal allowed level of current density and preventing application of current density above said maximal allowed level.

15. (Withdrawn) A method according to claim 14, wherein said determination is done in consideration of the tissue's sensitivity to electric current.

16. (Withdrawn) A method according to claim 14 further comprising determination of a maximal allowed duration of continuous current application to the tissue and preventing the continuous application of current for time durations longer than said maximal allowed duration.

17. (Withdrawn) A method according to claim 16, wherein said determination is done in consideration of the sensitivity to electric current of the tissue to be treated and of the current density applied.

18. (Previously Presented) A sponge for iontophoretic administration of charged drugs to a tissue of a subject, comprising:

a porous structure configured to absorb and hold at least 30% w/w of an aqueous solution of a charged drug without dissolving or disintegrating, the porous structure comprising a tissue contacting surface area; and

a data transmitting module configured and operable to transmit data indicative of one or more of sponge size and the tissue contacting surface area the sponge with the tissue of the subject.

19. (Previously Presented) The sponge according to claim 18, wherein the transmitting module is a chip.

20. (Previously Presented) The sponge according to claim 18, wherein the transmitting module is coated with a water protecting coat.

21. (Previously Presented) The sponge according to claim 18, further comprising non-hydrophilic polymer selected from the group consisting of a polystyrene, a polymethacrylate, a silicone and a urethane.

22. (Previously Presented) The sponge according to claim 18, further comprising a hydrophilic substance having at least one functional group configured to associate well with water molecules, the at least one functional group being selected from the group consisting of a hydroxyl group, an ether group, an amide group, a thiol group, a carboxylic acid group and an amine group.

23. (Previously Presented) The sponge according to claim 18, further comprising a hydrophilic polymer selected from the group consisting of a crosslinked hydroethylmethacrylate (HEMA), a polyethylene glycol, a crosslinked polysaccharideand a protein, and a polyvinyl pyrrolidone.

24. (Previously Presented) The sponge according to claim 18, further comprising a swellable hydrophilic-hydrophobic copolymer.

25. (Previously Presented) The sponge according to claim 24, wherein the swellable hydrophilic-hydrophobic copolymer is a HEMA-methyl methacrylate copolymer.

26. (Previously Presented) The sponge according to claim 18, wherein the tissue is selected from the group consisting of skin tissue, eye tissue and mucosal tissue.

27. (Previously Presented) The sponge according to claim 26, wherein the tissue is eye tissue.

28. (Previously Presented) The sponge according to claim 27, wherein the eye tissue is a selected from the group consisting of sclera tissue and cornea tissue.

29. (Previously Presented) The sponge according to claim 18, further comprising a micro transmitter.

30. (Previously Presented) The sponge according to claim 18, wherein the sponge is produced by copolymerizing hydroxyl methyl acrylate and ethylene glycol dimethacrylate.

31. (Previously Presented) The sponge according to claim 18, wherein the sponge further comprises a charged drug.

32. (Previously Presented) The sponge according to claim 31, wherein the drug is selected from the group consisting of an antibiotic, an antifungal agent, an anti-inflammatory agent, a water-soluble steroid, an anticancer agent and a local anesthetic.

33. (Previously Presented) The sponge according to claim 32, wherein the drug is an antibiotic.

34. (Previously Presented) The sponge according to claim 33, wherein the drug is gentamycin.

35. (Previously Presented) The sponge according to claim 18, wherein the surface area of contact is a substantially planar surface.

36. (Previously Presented) The sponge according to claim 18, wherein when an electrical current is passed through the porous structure of the sponge, and the sponge is pre-loaded with the aqueous solution, the drug ejects from the tissue contacting surface area.